CJ-series I/O Control Unit / I/O Interface Unit

CJ1W-IC/II

CSM_CJ1W-IC/II_DS_E_2_1

Expand CJ/NJ-series with These Units

- To expand a CJ/NJ-series Controller, connect an I/O Control Unit to the CPU Rack, and I/O Interface Unit to the Expansion Rack, and connect the two Units with I/O Expansion Cable.

CJ1W-IC101

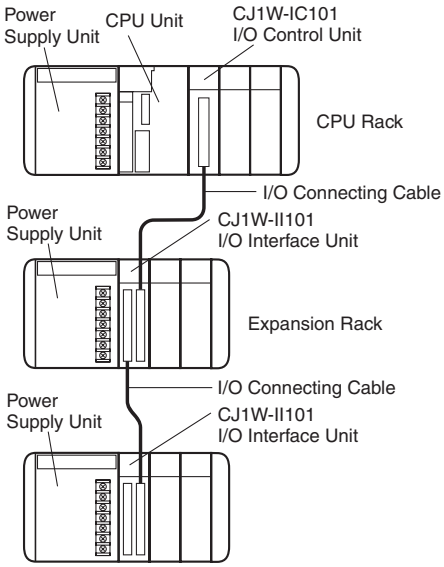
CJ1W-II101

Features

- Rack-mountable Units enable expanding Controller capacity even when space is limited.
- Easy-to-use connectors enable quick expansion without any settings.

System Configuration

The I/O Control Unit is connected directly to the CPU Unit. If it is not immediately to the right of the CPU Unit, correct operation may not be possible. The I/O Interface Unit is connected directly to the Power Supply Unit. If it is not immediately to the right of the Power Supply Unit, correct operation may not be possible.



Ordering Information

International Standards

- The standards are abbreviated as follows: U: UL, U1: UL (Class I Division 2 Products for Hazardous Locations), C: CSA, UC: cULus, UC1: cULus (Class I Division 2 Products for Hazardous Locations), CU: cUL, N: NK, L: Lloyd, and CE: EC Directives.
- Contact your OMRON representative for further details and applicable conditions for these standards.

I/O Control Unit (Mounted on CPU Rack when Connecting Expansion Racks)

Product name	Specifications	Current consumption (A)		Model	Standards
		5 V	24 V		
CJ-series I/O Control Unit	Mount one I/O Control Unit on the CPU Rack when connecting one or more Expansion Racks. Connecting Cable: CS1W-CN□□3 Expansion Connecting Cable Connected Unit: CJ1W-II101 I/O Interface Unit Mount to the right of the CPU Unit.	0.02	–	**CJ1W-IC101**	UC1, N, L, CE

Note: Mounting the I/O Control Unit in any other location may cause faulty operation.

I/O Interface Unit (Mounted on Expansion Rack)

Product Name	Specifications	Current consumption (A)		Model	Standards
		5 V	24 V		
CJ-series I/O Interface Unit	One I/O Interface Unit is required on each Expansion Rack. Connecting Cable: CS1W-CN□□3 Expansion Connecting Cable Mount to the right of the Power Supply Unit.	0.13	–	**CJ1W-II101**	UC1, N, L, CE

Note: Mounting the I/O Interface Unit in any other location may cause faulty operation.

Accessories

CJ1W-IC101 I/O Control Unit

There is no accessory for the I/O Control Unit Unit.

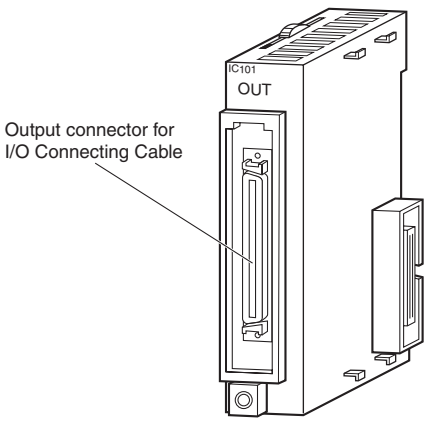
CJ1W-II101 I/O Interface Unit

The following accessories come with I/O Interface Unit:

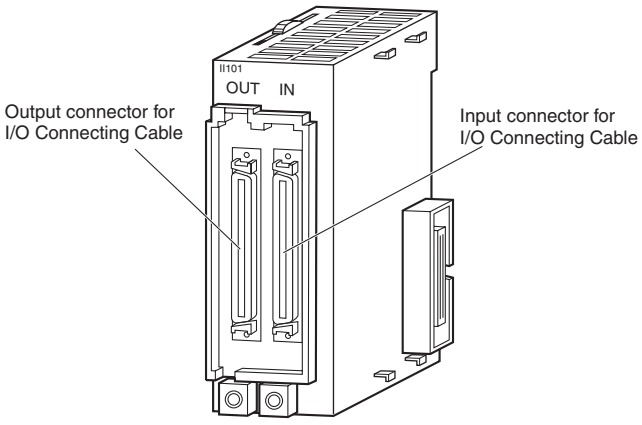
Item	Specification
End Cover	CJ1W-TER01 (necessary to be mouned at the right end of CPU Rack)
End Plate	PFP-M (2 pcs)

External Interface

I/O Control Unit
CJ1W-IC101



I/O Interface Unit
CJ1W-II101



Connecting Expansion Racks

CS/CJ-series I/O Connecting Cables are used to connect the CPU Rack and Expansion Racks.

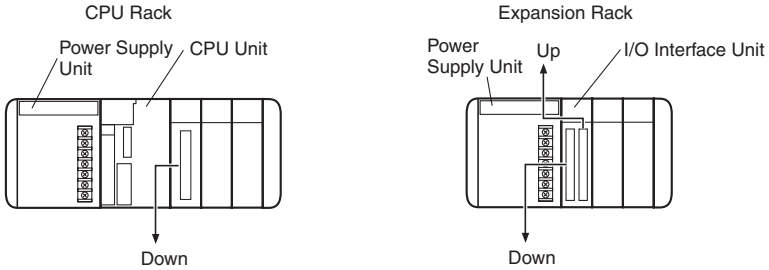
CS/CJ-series I/O Connecting Cables

The CS/CJ-series I/O Connecting Cables have connectors with a simple lock mechanism are used to connect the CPU Rack to an Expansion Rack or to connect two Expansion Racks.

CS/CJ-series I/O Connecting Cables

Model number	Cable length
CS1W-CN313	0.3 m
CS1W-CN713	0.7 m
CS1W-CN223	2 m
CS1W-CN323	3 m
CS1W-CN523	5 m
CS1W-CN133	10 m
CS1W-CN133-B2	12 m

- Install the Racks and select I/O Connecting Cables so that the total length of all I/O Connecting Cables does not exceed 12 m.
- The following diagram shows where each I/O Connecting Cable must be connected on each Rack. The Rack will not operate if the cables aren't connected properly. (The "up" direction is towards the CPU Unit and "down" is away from the CPU Unit.)



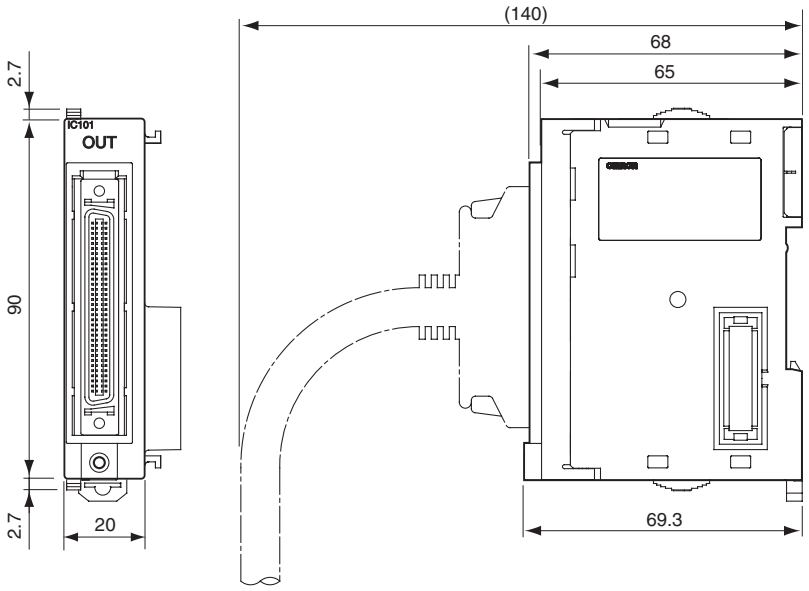
Usage Precautions

- CJ1W-IC101 I/O Control Unit is connected directly to the CPU Unit. CJ1W-II101 I/O Interface Unit is connected directly to the Power Supply Unit.
- The number of Expansion Racks that can be connected depends on the CPU Unit. Refer to the SYSMAC NJ-series CPU Unit Hardware User's Manual (Cat.No.W500), CJ Series Programmable Controllers Operation Manual (Cat. No. W393) or CJ-series CJ2 CPU Unit Hardware User's Manual (Cat. No. W472) for details.
- Use a CS-Series I/O Connecting Cable (CS1W-CN□□3) to connect an Expansion Rack.
- Install the Racks and select I/O Connecting Cables so that the total length of all I/O Connecting Cables does not exceed 12m.
- When using an I/O Connecting Cable with a locking connector, be sure that the connector is firmly locked in place before using it.
- Attached the enclosed cover to the I/O Connecting Cable connector on the I/O Interface Unit when it is not being used to protect it from dust.

Dimensions

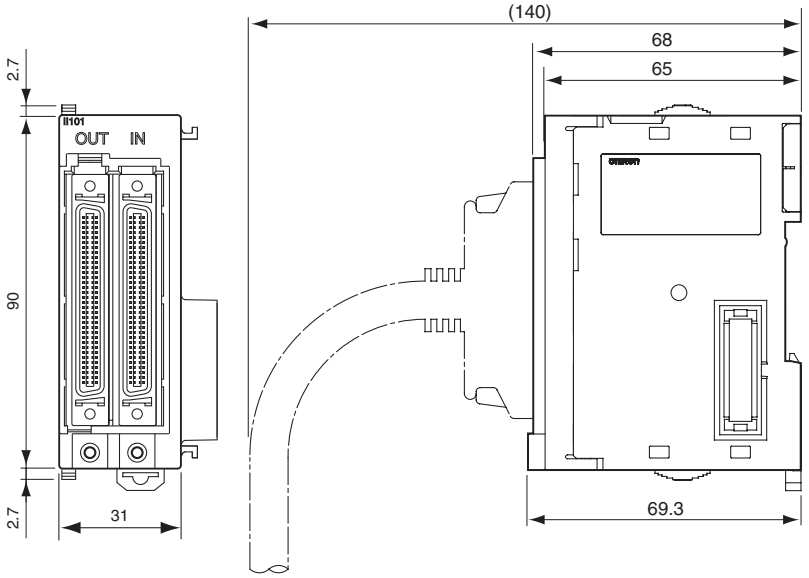
(Unit: mm)

I/O Control Unit
CJ1W-IC101



Note: Weight : 70 g max.

I/O Interface Unit
CJ1W-II101



Note: Weight : 130 g max. (including End Cover)

Related Manuals

Name	Cat. No.	Contents
SYSMAC CJ Series CJ1H-CPU□□H-R, CJ1G/H-CPU□□H, CJ1G-CPU□□P, CJ1G-CPU□□, CJ1M-CPU□□ Programmable Controllers Operation Manual	W393	Provides an outlines of and describes the design, installation, maintenance, and other basic operations for the CJ-series PLCs.
CJ-series CJ2 CPU Unit Hardware User's Manual CJ2H-CPU6□-EIP CJ2H-CPU6□	W472	Describes the following for CJ2 CPU Units: • Overview and features • Basic system configuration • Part nomenclature and functions • Mounting and setting procedure • Remedies for errors • Also refer to the Software User's Manual (W473).
NJ-series CPU Unit Hardware User's Manual NJ501-□□□□	W500	An introduction to the entire NJ-series system is provided along with the following information on a Controller built with an NJ501 CPU Unit. • Features and system configuration • Introduction • Part names and functions • General specifications • Installation and wiring • Maintenance and inspection Use this manual together with the NJ-series CPU Unit Software User's Manual (Cat. No.W501).

Terms and Conditions Agreement

Read and understand this catalog.
Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranties.
(a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.
(b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE
PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.
Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.
See http://www.omron.com/global/ or contact your Omron representative for published information.

Limitation on Liability; Etc.
OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.
Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

Suitability of Use.
Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.
NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

Programmable Products.
Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

Performance Data.
Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

Change in Specifications.
Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

Errors and Omissions.
Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

2014.9

In the interest of product improvement, specifications are subject to change without notice.

OMRON Corporation
Industrial Automation Company

http://www.ia.omron.com/

(c)Copyright OMRON Corporation 2014 All Right Reserved.